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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/653,272      | 08/31/2000  | Salman Akram         | 4181US (96-973.2)   | 4727             |

7590 12/03/2004  
James R. Duzan  
TRASK BRITT  
P.O. Box 2550  
Salt Lake City, UT 84110

EXAMINER

GARLAND, STEVEN R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2125

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/653,272

Applicant(s)

AKRAM ET AL.

Examiner

Steven R Garland

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004 and 03 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-26,28-41,43,45-63 and 65-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,6-24,28-41,45-59 and 80-108 is/are allowed.
- 6) ☒ Claim(s) 25,26,43,60-63 and 65-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/16/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/3/04 and 8/16/04 has been entered.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43 depends on canceled claim 42, and is therefore incomplete.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Beffa 5,915,231 ( cited by applicant ).

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Beffa discloses identification of an IC, use of a fuse or optical ID, reading the ID, storing data associated with the ID; testing, and accessing data to control processing. Beffa further teaches singulating; forming MCM devices, curing, bonding, sawing, etc. See the abstract; figures; col. 1, lines 28-67; col. 2, line 29 to col. 3, line 47; col. 3, line 59 to col. 4, line 44; and note the claims. Further note is taken that the devices when correctly processed have information associated with the ID that provides information as to the processes they have undergone.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 60-63, 65-68, 73, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beffa 5,915,231 ( cited by applicant ) in view of Moon et al. 5,326,709.

Beffa discloses identification of an IC, use of a fuse or optical ID, reading the ID, storing data associated with the ID; testing, and accessing data to control processing. Beffa further teaches singulating; forming MCM devices, curing, bonding, sawing, etc. See the abstract; figures; col. 1, lines 28-67; col. 2, line 29 to col. 3, line 47; col. 3, line 59 to col. 4, line 44; and note the claims. Further note is taken that the devices when correctly processed have information associated with the ID that provides information as to the processes they have undergone.

Beffa however does not teach the use of a dot or bar code, but does teach in col. 4, lines 20-25, the use of any type of code.

Moon et al. teaches the use of a dot code on dies. See col. 5, line 47 to col. 6, line 6.

It would have been obvious to one of ordinary skill in the art to modify Beffa in view of Moon and use a known dot or bar code to implement the code of Beffa for ease in implementing the code.

9. Claims 69-72 and 75-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beffa 5,915,231 in view of Moon et al. 5,326,709 as applied to claims 60-63,65-68,73, and 74 above, and further in view of Vu et al. 5,256,562 ( cited by applicant ).

Beffa discloses identification of an IC, use of a fuse or optical ID, reading the ID, storing data associated with the ID; testing, and accessing data to control processing. Beffa further teaches singulating; forming MCM devices, curing, bonding, sawing, etc. See the abstract; figures; col. 1, lines 28-67; col. 2, line 29 to col. 3, line 47; col. 3, line

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59 to col. 4, line 44; and note the claims. Further note is taken that the devices when correctly processed have information associated with the ID that provides information as to the processes they have undergone.

Beffa however does not teach the use of a dot or bar code, but does teach in col. 4, lines 20-25, the use of any type of code.

Moon et al. teaches the use of a dot code on dies. See col. 5, line 47 to col. 6, line 6.

It would have been obvious to one of ordinary skill in the art to modify Beffa in view of Moon and use a known dot or bar code to implement the code of Beffa for ease in implementing the code.

Beffa and Moon however do not teach the use of a laser or water jet for cutting. Beffa however does teach sawing and singulating. Note claim 23 of Beffa for example.

Vu et al. teaches the alternatives of a laser, water jet, or saw to separate semiconductor elements. See col. 7, lines 33-42.

It would have been obvious to one of ordinary skill in the art to modify Beffa and Moon in view of Vu and use a laser or water jet to separate ( singulate ) the devices. This would provide a longer lasting cutting element.

10. Claims 1-3,6-24,28-41,45-59, and 80-108 allowed.

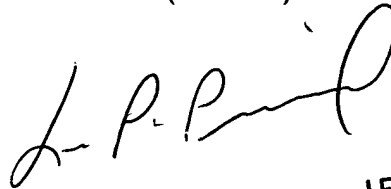
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached at (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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STEVEN GARLAND



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